

THE FARMER & GARDENER;

AND LIVE-STOCK BREEDER & MANAGER.

CONDUCTED BY I. IRVINE HITCHCOCK, AND ISSUED EVERY TUESDAY FROM THE AMERICAN FARMER ESTABLISHMENT, AT \$5 PER ANNUM, IN ADVANCE

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This publication is the successor of the late **AMERICAN FARMER**,

(which is discontinued,) and is published at the same office, at five dollars per year, payable in advance.

When this is done, 50 cents worth of any kind of seeds on hand will be delivered or sent to the order of the subscriber with his receipt.

American Farmer Establishment.

BALTIMORE: TUESDAY, JANUARY 6, 1835.

THE NEW YEAR.—We conform to the long established usage of noting the transition from the old to the new year. The custom is not only natural, but salutary. We wish that all the established usages of civilized society were as well founded and as usefully exercised as this.

The effect of the general expression of kind feelings and good wishes peculiar to this season, can hardly be other than salutary, by creating, in some degree, those feelings in our hearts. The custom also of adjusting our accounts with each other, and of ascertaining our gain or loss the past year, by our avocations, is an excellent one, and ought to be closely adhered to.

We tender to our subscribers and customers the compliments of the season, and renew our promise still to do them all the good we can, and the least possible harm.

GAMA GRASS.—We lay before our readers this week a letter on this subject from one of the earliest and most zealous cultivators of it. In a private letter accompanying his communication, the writer says:—

"Viewing the Gama grass as an adopted child of mine, I feel a consequent partiality, and have made a number of experiments in the mode of planting to ascertain its real value—the enclosed is the result of one with which I confess myself gratified, and I think it goes far to settle that point. Next year, when it will have filled the ground with its roots, I shall add the *steelyard*, and weigh every cutting of two acres—In yours of the 12th, I was much gratified to find you had *growing*, but sorry it stood so *thick*—The best mode of planting in the seed bed is to drill the first year 12 inches apart, rows two feet—The next spring take up the bunches, and divide them like shallots—this course I should take next spring.

By all means keep it cut every month, as this is found to *increase* the roots. This grass ought to be set out at farthest the second spring, but may be taken up like the sweet potatoe slip and set out the first year when the plants are 6 inches high.

"When I have a sufficiency of seed I adopt the last plan, but if anxious to propagate and have not plenty of seed, I take the first—The enclosed paper gives the detail. I have generally planted in a dry soil, but have succeeded admirably in a bog. The roots you obtained could not have been judiciously packed up—few understand this operation—I never fail by putting the roots in a clay retentive of moisture, and pack up in our moss, first sprinkling with water.

I regret extremely that your request as regards seed came too late. The seed drops generally in all July, but the next season, you may count on me. You cannot form any idea of the increased and increasing call for this seed from every part of the union."

NEW-YORK, Dec. 20th, 1834.

To the Editor of the Farmer and Gardener:

The pedigrees furnished you by Mr. Grieve,* are carefully taken by him from my cattle book, and are therefore to be relied upon as coming from me. Yours, respectfully,

[*See page 249.] DAVID HOSACK.

NEW AGRICULTURAL PAPER.—We have received "No. 1, vol. 1," of the **TENNESSEE FARMER**, printed at Jonesborough, Tenn. by Thomas Emmerson, Esq. It is a neat octavo of 16 pages, to be issued monthly at \$1 a year. It is a good omen, that the press is becoming more and more used for the benefit of the first of human interests—Agriculture. We heartily wish the editor success in his praiseworthy undertaking.

OHIO TOBACCO.—The Baltimore American has the following remark, in regard to the assorting and packing of Ohio Tobacco. We hope those interested will take a hint in a matter which so much concerns them.

"We have been requested to state, for the information of the growers of Ohio Tobacco, that great complaints are constantly made in relation to the manner in which their Tobacco is sent to market. The Tobacco raised there, generally con-

sists of green, red and yellow, which are indiscriminately packed in the same hoghead.—Upon being opened for inspection, a fair sample cannot be drawn, and when offered in a foreign market, the article is worth but little more than if it consisted altogether of the worst description. It is said that about nine tenths of the whole quantity sent to market is thus mixed. Planters, by bestowing more attention to the suggestion here made, would find their interest greatly promoted, as their Tobacco would bring better prices and meet with a more ready sale."

We will next week publish an excellent article on this subject, and we invite the editors of Ohio to copy it for the benefit of their subscribers.

[Ed. Farm. & Gard.]

THE MARKETS.—The ground is covered with snow, to a great depth for this climate, though our harbor continues open, and our tow-boat is ready on a moment's warning to pitch battle with Jack Frost, should he offer to set his seal upon our river.

Trade is paralyzed by the weather, except indeed for articles connected with sleigh riding, which are just now in great request, and command high prices. Our Price Current must be considered as rather a nominal affair for the present.

SUGAR FROM BEETS.—The manufacture of sugar from beets, which Napoleon endeavored to introduce generally into France, has grown lately into great importance. Millions of pounds of sugar are thus made. The principal cause of the extension of this manufacture is the discovery of the great benefits to agriculture connected with it. After the sugar has been extracted, there remains so nutritious a pulp, that in two months, without the employment of any other food, a great number of cattle may be fed upon it. The French Colonists, it is said, are becoming alarmed at the progress of this new branch of industry.

Mode of extracting Wax from honey comb.—Have on the fire an open vessel of boiling water, and standing by the fire an open vessel of cold water; put the comb close tied in a canvas bag, into the boiling water, and repeatedly squeeze it down with a stick or large wooden spoon; the wax will come through the bag, and swim on the top of the water: skim it off and put it in the vessel of cold water; by repeatedly squeezing the bag and skimming, every particle of wax is obtained; when congealed on the cold water it may be taken off and melted and cast into moulds, of any convenient shape for sale.—*Glasgow Mechanics' Magazine.*

THE FARMER.

GAMA-GRASS—MODE OF CULTIVATION.

[For the Farmer and Gardener.]

Among a number of experiments made, and making, by myself, and through the aid of kind friends, disposed to second my intentions, for the purpose of ascertaining the mode of cultivating the GAMA-GRASS, best calculated to bring that plant to the highest perfection, I have now sufficiently ascertained the result of the following, to feel justified in giving it to those who are cultivating that grass.

In the spring of 1850, I planted out a seed bed, drilling in rows 18 inches wide, 12 from plant to plant—they came up, and grew off well.—Early the following spring, I took up the plants, divided them, and set out, preparing the ground previously as follows:—The soil a grey sandy land, on a red, loamy loose clay.—The top soil six to nine inches, dark grey, and sometimes inclining to black.—The land had been two years in corn and peas, and was well set with crab grass—had made only three crops.—The last year the pea vines, and grass, were permitted to rest entirely on the soil.—About the first of October, the land got a good dressing of compost manure, stable dung, and cow pen with swamp mud. The cattle had been well littered with oak-leaves, and rye-straw, and the manure was literally long manure, in making which, not a particle of the liquor, or urine was suffered to be lost. This manuring was ploughed under in imitation of trench ploughing—one plough (bar shear,) following another of the same, but smaller—which effectually turned grass and pea vines under at least fifteen inches—on the top, rye was harrowed in, going with the furrow—previous to sowing the rye, the land was dressed with rotten limestone, a species that abounds in this section of country, and which had become pulverized by the preceding winter's frost and rain.

The rye came up, and grew off well—uncommonly rank, and furnished a fine mass of food for calves, and hogs, until the last of February, when all were taken off. By the first of April it was rank again. On the 2d, another top dressing of the compost, but in a state of more perfect decay, was applied, and well turned under with a small Freeborn plough—harrowing with the furrow.—The ground was now carefully laid off in drills, at two feet, and the plants placed in them, at the same distance.

During the year it grew well—the following year it “shot ahead,” and this season, it is “out of sight,” of any I have been able to raise, or have seen raised by the many gentlemen to whom I distributed seed. Every cutting since the first of May, (and that one averaged three feet,) has exceeded forty five inches in length. It was prevented from seeding, for the purpose of ascertaining the production. After the cutting in May, rotten cotton seed was strewed over the ground—and which was worked in amongst the roots, when the ground received a loosening amongst the plants, after that first cutting. The season has been highly favorable. The cutting took place on the first day of each month, commencing with May—and five cuttings have been made—the

grass fed away, green, to working oxen, horses, and mules—cut up in a patent cutting box, and mixed with about one fourth of oats straw, (not threshed) a sprinkling of meal was added, say one pint tin cup full to each animal twice per day. At each cutting, a number of the smallest bunches were weighed, and also of the largest—None found less than five pounds, and many fifteen, and some sixteen and seventeen—A fair average, I am satisfied, would be, eight pounds per plant, at each cutting—and seven cuttings in the season.—In the mode of planting to which the extraordinary luxuriance was owing, I was governed by a knowledge of the singular depth, to which this plant extends its roots into the earth.

Believing that a deep soil by nature, or made so by art, was alone calculated to show the best production of this plant, I have been anxious to see the result, under favorable seasons, and confess myself now satisfied.

From each cutting, I made a small stack of hay, cutting after the dew was off, and mixing, alternate thin layers of grass, and oats straw, with a sprinkling of ground alum salt, on each layer of grass.—It cured well.

A few handfuls of each cutting were cured, alone, in the sun—that cut in May, gave fourteen pounds of grass—six pounds of hay—each cutting gaining in result.

AGRICOLA.

Alabama, Oct. 4th, 1834.

GREAT SCALDING AND LOSS OF LIFE—HORRID BUTCHERY.

A correspondent of the Baltimore Patriot has written a most sanguinary letter from Cincinnati, describing the manner in which hogs are “used up” in that celebrated capital. Some of the statements would, in our opinion, better become a “fish story” than the subject concerning which they are made, but we shall, nevertheless, re-tail them for the amusement if not for the information of our readers. He tells us that—

“Cincinnati is the greatest ‘Pork market,’ in the known world. The number of hogs slaughtered annually, and the perfection and science to which the art of ‘hog-killing’ has been brought, is indeed astonishing. The business of butchering, is carried on distinct from that of packing, and by different persons. The most extensive establishment of the kind, is the one on Deer Creek, owned and conducted by Mr. John W. Coleman. At this place, last year, 100,864 hogs were slaughtered. There are four houses situated at different points on the ground occupied, which is a lot of eight acres—the ground is divided into pens some 40 or 50 in number, where the hogs of each owner are put by themselves preparatory to the massacre. About 40 men are employed in each house, and each has his separate and allotted duty to perform, and receive on an average about \$1 25 per day. Each house has two scalding tubs, one at each end, so that the work of ‘death and destruction’ goes on double in each building. At each end of the house is a small pen, into which they crowd 40 or 50 hogs, or as many as can possibly be got in—then walks in on their backs, the dark and bloody executioner, holding

in his hand a large sledge hammer, with which he ‘deals death’ to the unoffending victims—after which they are dragged inside the house, a knife passed into the throat, and after bleeding a few seconds, thrown into a kettle of hot water, from thence to a block, where the bristles are scraped off with iron scrapers, made expressly for the purpose—then strung up by their hind feet and dressed—thence removed to another room, where they remain ‘to cool’ until morning, and then taken on wagons to the packing houses. It is but a little over one minute from the time the executioner enters the pen and knocks the hog down, till he is strung up and dressed. The bleeding, scalding, scraping, stringing up, and inside dressing, is all accomplished in about a minute. This will be thought marvellous, but it is no more strange than true. I have frequently witnessed with astonishment the operation. At one of Mr. Coleman’s slaughter-houses, he has a man that opens, removes the offal, and completes the dressing of three hogs in a minute—to this man (who is a sort of king among the hog-killers) he pays two dollars and fifty cents per day.

They can slaughter at each of the houses, and have them completely dressed and strung up, (preparatory to removal in the morning to the packing houses,) six hundred and fifty in a day, which is altogether, at this one establishment, twenty-six hundred—and this done from day-light in the morning till dark, say at this time, about eleven hours, allowing 30 minutes for dinner. Mr. Coleman informed me, that he has already killed this fall between 50 and 60 thousand, and has been at work but 3 or 4 weeks; the only pay he receives is the offal, consisting of rough fat, soap grease and bristles; this is generally worth, net 20 to 25 cents each hog. It is supposed he cleared at this business last season (and the season lasts but about three months) some 15 or 20,000 dollars. The whole number of hogs killed last year, in the city and vicinity, is ascertained to be a little rising one hundred and twenty-three thousand. Deer Creek is a stream running into the Ohio river on the eastern suburb of the city; about half a mile up this stream, these slaughter-houses of Mr. Coleman are situated, and during the whole ‘hog season,’ this stream, from the houses to the river, is running blood, and generally goes by the name of ‘bloody river.’

Others are engaged in the slaughtering business, but not on so large a scale as Mr. Coleman, who is, what Yankees call, a ‘smart’ man.

From the slaughter houses, the hogs are conveyed in large wagons, that hold from 25 to 40, to the various packing houses, which are situated in almost every part of the city, and there weighed, cut up, packed, &c. The purchasers pay for them as per the weight, after being dressed. These packing houses are upon the most extensive scale. The capital employed every year in the ‘hog business,’ is immense, probably about two millions of dollars. One of the most extensive packing houses in the city, is owned and conducted by Miller & Lee; their building is of brick, three stories high, 120 feet long, 60 wide, with outbuildings, sheds, &c. that cover for all I know, an acre of ground. These men, who are very enterprising, have a high reputation for the uniform excellence of their Pork, as also for the

superior Hams; their 'sugar hams' are said to be as good as any cured in any part of the Union. There are other 'Pork Houses' equally large, and on an extensive scale. At one of these they can pack and have ready for shipment *two hundred and fifty barrels of pork in one day*, and I am informed, upon a pinch, *three hundred barrels* could be turned out, and that with *thirty men in about fourteen or fifteen hours*. It is, indeed, astonishing, the rapidity with which they put a hog out of sight, when they once get fair hold of him. As at the slaughter houses, a perfect system is kept up, every man has his allotted duty to perform, and there is consequently no interference with each other; every thing goes on 'like clock work'; when the hogs are received, they are first weighed, by the weigher, then passed to the "blocking men," who place them on the several blocks, (two are generally used) when they are received by the "Cutters," and are very quickly despatched; the various qualities separated and thrown into their respective places. One man weighs for the barrels, (200 pounds,) and throws the meat into the "salt box," from which the "Packer" receives it, and when the barrel is packed is turned over to the "Cooper," who heads it; it is then bored, filled with a strong brine, plugged, branded, and ready for shipment. Fifty pounds of Turks Island, or other coarse salt, is allowed to each barrel of pork.

The Lard is cut into small pieces before going into the kettles; the leaf lard goes into one kettle, and the rough lard into another; there are generally eight or ten men employed in the lard department, when an average of *two hundred kegs, or about nine thousand pounds are turned out daily*.

A large quantity of "bulk meat," is generally produced, this is from small hogs, too light for prime pork. The hams are smoked and generally canvassed before shipping. They are, however, very unlike a lot of Kentucky canvassed hams, sold a few years since at Port Gibson, which on examination, after the seller had gone, were found to be of wood, instead of "hog meat." Better hams cannot be procured than those smoked in Cincinnati. The hams cured by Miller & Lee, W. Hartshorne, W. M. Walker, William Irwin, and in fact, by all our "Pork makers," can rarely be equalled in quality. Technical names are used in Pork Houses as well as in most branches of business. The following are a few of them: "Blockers up," "Cutters," "Briners," "Kettle Tenders," "Choppers," "Lard Trimmers," "Ham Trimmers," "Bulkers," "Lard Drawers," "Packers," "Coopers," "Weighers," &c. &c.

I am informed, the largest quantity of Pork packed last year, by one house, was Burdell and Davis, for the Messrs. Winchesters of Boston, the number of barrels being between 5 and 6000. No one establishment will pack as much this year. Many of our merchants are engaged largely in the packing business, at various points in the vicinity of the city,—At Rossville, Hamilton, Middletown, Lawrenceburgh, &c. It is estimated that the quantity of Pork exported last year, from Cincinnati, which includes that packed in the above towns, fell very little short of 45,000 barrels, about 85,000 kegs of Lard, 270,000 Hams, besides

Shoulders, Sides, bulk meat, &c. One of our enterprising citizens alone purchased, I am told, last year, 35,000 kegs of Lard, and fortunately it proved a profitable investment. There are altogether in the city, about 26 or 27 pork houses, and they now employ about 10 to 1200 men, at an average of a dollar per day. At the commencement of the season Hogs appeared plenty, and were purchased at a fraction lower than last year, say \$3 per hundred for those averaging 280 pounds. I am informed that they are now becoming more scarce, and that the price is advancing. There will not be so many packed this year as last. Some that were engaged in it last year, lost more or less money, owing to the distress in the country, and the impossibility of effecting sales at fair prices; so that there are, probably, not as many engaged in the business as formerly. Money now being more plenty than last year, and a general demand existing for the article, ready sales at fair prices will be made. The demand now in this market for Pork and Lard is good, and a gradual advance in price has and will continue to take place. Most of our pork packers are men of wealth, and can consequently "hold on," there will be no necessity of forcing sales. However, they cannot pack enough before the season closes to supply the demand, which is much increased by many of the army contractors being in the market, and wishing to purchase to fill their contracts."

[From the Political Arena.]

[Communicated.]

The members of the Agricultural Society of Fredericksburg commemorated their 16th Anniversary on Thursday and Friday last; on which occasion they had a Show and Fair, much superior to any but one, that they have ever had before; for although the number of Animals exhibited fell short of that brought forward at one or two of their first exhibitions, they were generally of far better quality. This remark applies particularly to the Stallions, Colts and Bulls—the premium Animal in each of these cases being uncommonly fine; which circumstance warrants the belief that the effort to improve the breeds of our horses and cattle are now much more zealous, as well as more judiciously directed than formerly.

This last meeting was also distinguished, not only by a much fuller attendance of old members than for several Anniversaries past; but by the accession of twenty new ones, most of whom are practical Agriculturalists. Such increase of strength in members, as well as of zeal in those long attached to the society, affords strong evidence, not only that the Society itself, by its vigorous continuance, will wipe away the old reproach, that Virginians can never persevere in any good work: but that the spirit of improvement in every branch of husbandry is now actively at work in a very large portion of the ancient dominion; and that the most beneficial result may be anticipated from its future operations. This society, it is believed is not only the oldest in Virginia, but the only one that has been kept up from its first establishment to the present day; and there is every reason to hope, from present appearances, that its members, (to borrow a sailor's phrase,) "will never give up the ship."

We regret to add, that our good friends—the

ladies—did not exhibit as many articles of domestic Manufacture as usual; but it is a tribute we gratefully pay to them to remark, that such as were exhibited afforded very excellent specimens of what their industry, skill, and ingenuity can accomplish, whenever they choose to exert them. We have great reliance upon their aid; and should seriously lament any intermission of their previous co-operation in the effort to interest the public in our exhibitions. If they desert us, from any fault on our part, we shall deserve all that may happen to us in consequence of this desertion.

Among the curiosities exhibited at the meeting were twenty-five stalks of corn, with their produce of one hundred and four ears,—the average being a fraction over five ears to the stalk. This corn was raised on high land by Mr. G. W. Bassett, one of the members, and probably the same variety recommended by the President. It is called in Spottsylvania, Alsop's corn, from the name of the farmer who first brought it into notice. Another member stated that he had cultivated the same kind on low land, and that he was confident he could gather a greater number of ears from the same number of stalks.

The other curiosity was some seed having exactly the same appearance with that of the Gama-Grass, and believed by those who saw it to be identical. It was found by Mr. Jno. Dickinson, —another member of the society, in some low land, upon his farm on the Rappahannock, in Caroline County, about 16 miles below Fredericksburg; and was gathered from 2 bunches of grass which, (as he stated,) resemble the gama-grass in every respect.

These two circumstances are not of much moment in themselves; but they add to the mass of such facts, as it is one of the purposes of Agricultural Societies to collect, and to disseminate; and therefore they are offered for publication in your useful Journal.

The introduction and general extension of the Lyceum System is destined to produce more beneficial results to our country than any other of the many improvements of this enterprising age, was the opinion of the late Mr. Grimke, who united in a rare degree the highest endowments of intellect with a pure and zealous philanthropy, and an industry that never tired in the pursuit and diffusion of knowledge, and whose untimely death was a national calamity. Nor can such an opinion be regarded as extravagant, when it is known, that the design and tendency of this system is, to bring every child in the nation within the pale of instruction.

We are glad to learn that the Baltimore Union Lyceum, only recently established, is making most successful progress towards the accomplishment of its high purpose—which is, besides extending the blessings of education to every child in the city, to create and keep alive in the community a spirit that shall work general mental improvement, by the diffusion of knowledge and the promotion of Christian benevolence.—*Balt. American*.

Mr. Buckingham estimates the loss of labor in England by the use of ardent spirits at \$12,000,000.

THE BREEDER & MANAGER.

[From the London Lancet.]

LECTURES ON VETERINARY MEDICINE,
Delivered in the University of London by Mr.
Youatt—Lecture VIII.

GLANDERS CONTINUED.

The Lining Membrane of the Nose the Primary Seat of glanders.—There can be no doubt, I think, Gentlemen, of the conclusion to which we must arrive, that the primary seat of glanders is the lining membrane of the nose. A discharge from the nostril is that which causes the disease to be first suspected, which attends it through every period of its course, and accompanies it at its fatal termination. It is inflammation of the pituitary membrane, recognised by that which is the earliest and invariable symptom of inflammation or a mucous surface, increased secretion—secretion altered in character as well as quantity, becoming vitiated, acrimonious, malignant. I will not enter into the controversy whether it be a specific inflammation—one that is not governed by common laws—or whether the malignant and infectious character which it speedily assumes may be traced to the extreme vascularity and sensibility of the membrane, and the absurd and injurious irritation to which it is so much exposed.

The Progress of the Inflammation.—It is inflammation, whether specific or common, of the pituitary membrane—possibly for months, and even for years, confined to that membrane, and even to a portion of it—the health and the usefulness of the animal not in the slightest degree impaired. Then, from some unknown cause, not a new but an intenser action is set up, the inflammation more speedily runs its course, and the membrane becomes ulcerated, and the ulcerations spread on either side, down the septum, and along the pharynx, the larynx, and the trachea. The ulceration spreads through the medium of the absorbents—the superficial absorbents first. The secretion is of so acrimonious a nature, that the vessels through which it passes take on inflammation, and the virus accumulating about the valves of the absorbents, the inflammation runs higher there, and ulceration speedily follows, and assumes that peculiar chancreous form which characterises inflammation of these vessels.

Observe these specimens; see, running along the course of the main trunk of the absorbents of the membrane of the septum, or radiating from it, these distinct and separate ulcerations, and mark the elevated line which connects one with another. The simple increased secretion does not empoison, or even excoriate, the membrane, nor does it produce any constitutional affection while the membrane remains sound; but, ulceration having once commenced, the disease is propagated from part to part, and with more or less rapidity, through the medium of the absorbents, and the whole frame becomes vitiated. This more general and constitutional affection we term *farcy*. When the air-passages and the respiratory organs alone are involved, we denominate it *gladders*.

The Lungs not the Primary Seat of Disease.—It is plain that the lungs are not the primary seat of disease. When they are affected, it is by continuity of membrane, and by the gradual spread of

inflammation and ulceration. In some of the cases which I mentioned in my last lecture, and which were suffered to run their course, the lungs were sound. In the majority of cases the inflammation or disorganisation was confined to the lung corresponding with the nostril whence the discharge had proceeded. When the lungs do seem to participate in the disease, they are comparatively but slightly affected. There are miliary tubercles, but with only slight congestion, and no ulceration. Where vomicae are found, peripneumony had preceded or accompanied glanders, and was excited by other causes. In latent or invidious glanders there is no poison in the blood, no unhealthy state of the system; every function, is fully and perfectly discharged. Absorption of the fluid discharged from the ulcer must precede the constitutional affection.

I have described the process from inflammation to ulceration, and from that to the empoisonment of the system, as often exceedingly slow; but, as in the other constitutional affections produced through the means of the absorbents, it is sometimes quickened almost beyond belief. If the exciting cause of inflammation in the membranes, has more than usual power, or, from debility or previous irritability, the membrane is predisposed easily and violently to take on inflammatory action, the disease will run its course in four-and-twenty hours; but the same appearances are presented, the same process is clearly marked; the ulcers follow the direction of the absorbents along the septum, and along the membrane generally, and along the trachea to the lungs. It is the same disease, but differing only, yet sometimes strangely differing, in the intensity and rapidity of propagation.

M. Dupuy's notion of Glanders.—M. Dupuy, and after him many of the French veterinarians, entertain a curious notion of the nature of glanders. He calls it “a tuberculous disease.” He supposes that innumerable small, firm, grey, bodies, miliary tubercles, are formed on the upper part of the septum, or in some of the sinuses, particularly the frontal ones. That for a certain period of time they remain unchanged, and during that time do not in the slightest degree interfere with the health of the animal; nor are there any means of ascertaining their existence, except that by their presence as foreign bodies they so far irritate the membrane on which they grow, as to cause a somewhat increased secretion from that portion of the membrane. They continue in this state an indefinite period of time. He thinks that he has traced their existence for five or six successive years. At length from some unknown cause they become disorganised; they soften and ulcerate, and then we have the chancre of glanders. These chancres sometimes penetrate through the perichondrium and the cartilage, the periosteum and the bone; they discharge a poisonous fluid, a portion of which is absorbed; then the whole frame becomes affected, and the disease may be communicated to others.

This theory is very ingenious, but it is deficient in proof. I am not aware of any English veterinarian who has detected these tubercles; and of one thing I am certain, that if they exist, the disease is contagious long before they disorganise and break.

GENERAL VIEW OF GLANDERS.

Now then, Gentlemen, we can conveniently pause for awhile. We are arrived at a point whence we can command much of the path we have yet to travel. Let us look around us a little, and somewhat retract our steps. Glanders is inflammation of the Schneiderian membrane, strictly local for a while, and often for a long while, and during its insidious state, and even when the discharge becomes gluey, and sometimes after chancres have appeared, the horse is apparently well. There are hundreds of glandered teams about the country with not a sick horse among them. Do not listen to the accounts which you hear of the glandered horse being necessarily more or less out of condition; or that some deviation from health is necessary to his receiving the infections of glanders. Do not puzzle yourselves with the distinction between “healthy and unhealthy disease,” a strange connexion of terms, and as unintelligible as many parts of an otherwise valuable work on glanders. Quit the dangerous yet often fascinating regions of theory, and look beyond the walls of an infirmary, where disease alone is found and lives. Go into practice, examine the stables of the farmer and the postmaster and the wagon proprietor, and more particularly the miserable huts that shelter the barge-horse. These are the very domain of glanders, and many an inhabitant yields to its influence. When the disease has developed itself in all its chancreous malignancy and power, we see enough, and more than enough, of its ravages; but, ere it throws off the mask, although it is in full possession of its victim, where do we find horses so hardy, so healthy, so capable not only of ordinary, but of cruel exertion? I cannot say that glanders, like the rot, improves the condition, but I am sure that often, and for a long while,—for months and even for years,—it does no injury to the general health. The inflammation is purely local, and is only recognised by that invariable accompaniment of inflammation,—increased secretion. Although that secretion is poisonous, and its neighbours fall victims to it, it affects not the animal whence it came. But this continued inflammation at length tells, or other circumstances increase its power and its effect, and the vitality of the tissue is destroyed, and suppuration succeeds; but not that of a healthy character—not that which is connected with reproduction,—it is malignant and destructive from the beginning; but soon another process commences, salutary or destructive, according to circumstances. There are absorbents on every surface; they are found on the surface of the chancres which are beginning to appear; and they take up the fluid which is secreted from the ulcers, and they soon feel its poisonous influence. The absorbents become inflamed and tumid, and where the virus rests as it were, namely, at the valves, destruction of the part ensues, and the chancres spread in every direction.

Some portion of the venom passes on, and is carried into the circulation, and mixes with the blood, and vitiates the blood. The experiment by Professor Coleman, of the transfusion of a portion of the blood of a glandered horse into a healthy ass, and the transfusion of the disease with it, was satisfactory on this point.

Then comes the constitutional affection. The

membranes in the neighborhood, and those most susceptible of irritation; first, yield. Chancres proceed down the pharynx and the larynx, and gradually the ulcers spread over the frame. The acrimonious fluid, mingling with the blood everywhere, begins everywhere to attack that tissue which is most susceptible of its influence, namely, the internal lining membrane of the absorbents; and in the most distant parts of the frame (the hinder extremities are a favourite situation) the absorbents become corded, and tumours appear in the situation of the valves, and ulcerations ensue. First, the superficial lymphatics are affected; then the deeper-seated become involved: the whole frame is enpoisoned; farcy is established in its most horrible form, and death speedily closes the scene.

CAUSE OF GLANDERS.

What is the cause of this dreadful malady? Although it may by-and-by prove that we are powerless as to the removal of the disease, yet if we can trace its cause and its manner of action, we may do something in the way of prevention at least. We have been able to accomplish much in this way. Glanders does not commit one-tenth part of the ravages it did thirty or forty years ago, and it is now only found, as a frequent and prevalent disease, where neglect and filth, and want of ventilation exist.

The Character and Office of the Schneiderian Membrane.—Its seat is the Schneiderian membrane; a highly vascular one—a tissue of blood-vessels—a membrane possessed of exquisite sensibility, specific and common, and these mingling together for the perfection of each,—thus vascular and sensitive, placed as a guard to the lungs; covering within and without those convoluted bodies which, in a manner, fill the whole of the nasal cavity, and everywhere expose its mucous surface; intercepting every deleterious substance, and even gas. Comparatively few particles penetrate to the pharynx, or if they do, the sentinel has given warning, and other air-passages take up the action. The rimæ glottidis refuse to admit, or the muscles of respiration unite to expel, the intruder. Little beside pure atmospheric air is destined to reach the lungs, or if the animal is destroyed by some deleterious gas, he dies more from the want of that oxygen which is necessary to the continuance of respiration, than from the actual stimulant or depressive effects of the inspired air.

The Schneiderian membrane is the guard of the lungs, and it arrests every intruder. No part of the frame has a more important function to perform,—no part is endowed with great sensibility,—no part is exposed to so much injury. The currents of air which are continually traversing it; the thousand extraneous bodies which are impinging upon it; the pungent and poisonous vapours which are coming so incessantly in contact with it; all are sources of irritation and debility, and we need not wonder that it is so disposed to inflammation, and that that inflammation will run its course.

Alterations of Temperature.—Besides the injuries to which it is unavoidably exposed, there are others, and far more powerful, artificially and absurdly introduced. I have adverted to them when speaking of coryza. Nothing could be so debilitating or so dispose this membrane to in-

flammation and all its consequences, as the sudden change of temperature to which this sensitive membrane used to be exposed, in that destructive system of stable management which once everywhere prevailed, and which is still maintained in too many establishments. The heat alone of the stable, without the sudden and excessive change, would wear out the vital power of the membrane, by the constant state of excitement it produces.

Ammoniacal Vapours.—But, worse than this, and more connected with our subject (for these alternations of heat and cold are far more injurious to the lungs than to the membrane of the nose, and dispose more to pneumonia than to glanders), there are the irritating pungent vapours which abound in every heated and closed stable. I have said that the lining membrane of the nostril, and the conjunctival membrane, are painfully irritated when we breathe but for a few minutes, the atmosphere of these ill-managed stables. The horse breathes there all night and the greater part of the day. The injurious effect of these gases is spent on the pituitary membrane chiefly, or alone with the exception of the eye. By it the ammonia, so plentifully extricated, is arrested and absorbed. If the slightest portion of it reached even the larynx, violent, and so long as the stimulus was applied, incessant cough would be excited. All the mischief which is done is inflicted on the conjunctival and Schneiderian membranes, disposing the one to the specific inflammation of specific ophthalmia, and the other to the inflammation of glanders, or supporting that inflammation when excited. The lungs are comparatively little or not at all affected.

Often-Respired Air and the Vapours of Putrefying Substances.—But there are other changes going on in the air of the closed stable, not so deleterious as some have imagined, nor affecting the constitution in the way that they have described, but sufficiently productive of evil. The often-respired air, and the gases extricated in the putrefactive fermentation of the filth of the closed and neglected stable, are depressive perhaps rather than stimulating—they are productive of low and typhoid diseases rather than of acute ones, and they produce their first, their grand, almost their only effect, on that mucous membrane, among the sinuosities and convolutions of which they wind, and by which too they are arrested and absorbed; or, if the constitution suffers, it is through the medium of this membrane, this frequent, prevailing, but little suspected, inlet of infection and disease. The membrane which we know does arrest the ammoniacal gas, so that scarcely an atom of it reaches the larynx, arrests likewise these deleterious vapours; but it suffers sadly in the discharge of this all-important function, and is disposed for low and typhoid inflammation, degenerating into, or perhaps constituting, glanders. Therefore it is that the foul stable is the very hot-bed, not of pneumonia, but of glanders; for it is the membrane of the nose, far more than that of the lungs, which is exposed to its fatal influence.

On this account is the paramount importance of free ventilation in the stable. We owe every thing here to Professor Coleman. While the cavalry barracks, forty years ago, were continually thinned by this equine pest (and I have heard

that in one of the dépôts, at the close even of the Peninsular war, several hundreds of horses were condemned in one morning), it is a disease now of comparatively rare occurrence among our troops. Agreeing in the general effect, and thankful for the result of ventilation, I am not disposed to cavil much, even when the principle is pushed to a somewhat extravagant extent. I can understand the good of it with reference to the disease now under consideration.—These gases impinge upon the Schneiderian membrane, and, like the ammoniacal gases of the stable, are arrested and absorbed by it, and have their debilitating effect in the productions of glanders. But when I am told that this want of ventilation is the cause of a rabies in the dog and the rot in sheep, I do wonder a little. That wonder ceases when I consider how prone our best physiologists and pathologists have been to push their favourite theories too far, and that even the immortal Jenner, upon subjects not altogether dissimilar, and having reference to some of our domestic quadrupeds, rode his hobby-horse farther and more wildly.

Comparison of different Stables.—Want of cleanliness and ventilation are the grand sources of glanders; the latter acting to a certain extent; the former far more influential, but deriving its greatest power to injure from an alliance with the latter. No stables used to be closer and hotter than those of gentlemen; they were perfect ovens, and the same foul air was breathed over and over again. There used to be, and there is still, pneumonia often enough, for there was an absurd and ruinous change of temperature; but glanders was was an unfrequent or unknown guest. Why? The fecal impurities were cleared away as quickly as possible.

The stables of the horse-dealer used to be, and still are, hot enough, in order to put a sleekness upon the coat; and there was and is plenty of catarrh, and catarrhal fever, and pneumonia, but no glanders, for cleanliness was the order of the day.

The farmer's stable was, and continues to be, ill managed and filthy enough; urine and dung accumulate from week to week, until the place is a perfect dunghill; there is no declivity to drain away the urine, no water to wash away the filth; but the same carelessness prevailed everywhere—below, around, and above; but the windows were broken, and the roof was anything but airtight, and there was many a cranny in the walls, and the fumes were driven away as fast as they arose.

But the stables of the post-master, and the wagon-proprietor, and the proprietor of the barge-horse,—sometimes almost too low for an ordinary man to stand upright in, too dark for the accumulation of filth to be observed, too far from the master's eye for the stableman to do his duty, and where the fumes of the feces and the urine are continually arising,—these, I have said, are the very hot-beds of glanders; there it is almost a constant resident.

Glanders is, in a manner, the consequence of stabling the horse. In many parts of the world it is unknown, as in South America and Arabia, and it used to be in Portugal and in Spain, but in the two last, and in North America and in British India, it is now rife enough. Wherever our stabling, with all its absurdity, was introduced, there glanders followed in its train.

THE GARDENER.

[From Bridgeman's Gardener's Assistant.]

ON THE CHOICE OF FRUIT TREES IN THE NURSERY.

[Continued from page 279.]

APRICOTS.

1. *Red Masculine, Abricot Precoc, Abricot Hâif Musque, Early Masculine*.—This is an old variety, the fruit of which is small, of a roundish form, and greenish red color; the pulp is tender; the tree a good bearer, and the fruit esteemed for its earliness and tart taste; ripens in July.

2. *Hemskirke*.—Fruit middle sized, roundish, slightly compressed; of a bright yellow color; flesh tender, juicy, with a particularly rich, delicate flavor, resembling that of the Green Gage Plum; ripe in July.

3. *Musch-Musch*.—Fruit round; of a deep yellow color; remarkable for the transparency of its pulp, through which the stone is visible; the flesh is very fine and agreeable; ripens in July.

4. *Early Orange, Royal George, Royal Orange*.—The fruit of a medium size, of a deep yellow color, spotted with red or dark purple next the sun; flesh deep orange, succulent and well flavored; not perfectly a freestone; ripens early in August.

5. *Breda, Abricot de Hollande, Amande Aveline, Royal Persian*.—Fruit medium size, of a round form, and deep yellow color; the pulp is soft and juicy; the tree a great bearer, and the fruit, which ripens early in August, is in great esteem.

6. *Brussels*.—Highly esteemed for its productiveness: fruit medium size, inclining to an oval form; of a red color next the sun, covered with numerous dark spots; the flesh is of a greenish yellow color, of a brisk flavor, and not liable to become mealy; ripens in August.

7. *Moorpark, Hanson's, Temple's Dunmore's Breda*.—The tree is of vigorous growth, and extraordinarily productive; the fruit is very large, of a bright gold color, or orange, with dark spots next the sun; flesh orange color, melting and excellent; ripens early in September.

8. *Purple, Alexandrian Apricot, Abricot Angoumois, Abricot Violet, Black Apricot*.—A small, globular, downy fruit, a little oblong; of a pale red color, becoming deep red or purple next the sun; flesh pale red, but orange next the stone; a little acid, but good; ripens in August.

9. *Turkey, Large Turkey*.—A superior Apricot; fruit of a medium size, deep yellow color, with red blotches next the sun; form globular; flesh firm, juicy, rich and excellent; ripe by the end of July.

10. *Peach Apricot, Abricot Pêche, Abricot de Nancy, Imperial Anson*.—This is a first rate fruit; form variable, generally flattened; skin slightly downy; fawn color next the sun, tinged with reddish spots or points; pulp yellow, melting, juice abundant, high flavored and excellent; ripens early in August.

11. *Blotched Leaved Roman, Blotched Leaved Turkey, Variegated Turkey, Abricot Macule*.—Tree vigorous and productive; fruit large size and round form; of a deep yellow color, but the pulp not very juicy; ripens early in August.

12. *Royal, Abricot Royale*.—This fruit is next in size to the Moorpark, rather oval, compressed; of dull yellow color, slightly red; flesh pale orange, firm, juicy, sweet, and highly flavored, with slight acid; ripens early in August.

CHERRIES.

The first 14 varieties are round fruit, the last 16 heart shaped.

1. *Early May, Small Early May*.—This variety is well calculated to be trained in espalier form, being naturally dwarfish. The fruit, which is of small size, is ripe before any other; its taste acid but pleasant, and the skin of a red color.

2. *May Duke*.—Fruit medium size, round, and a red color; it ripens in the beginning of June, and the flesh is a soft and an agreeable acid; the tree a good bearer, and the fruit excellent.

3. *Late Duke, June Duke*.—A cherry of large size; flesh very rich; it ripens in July and lasts long on the tree, improving in its flavor. The tree is of vigorous growth and an abundant bearer.

4. *Ambree, Cerise Ambree*.—A large cherry with a round head, flattened at the opposite end; marbled with red and yellow in the shade, bright red next the sun; flesh white, somewhat transparent, very juicy, sweet, and excellent, ripe in June and July.

5. *Arch Duke, Griotte de Portugal, Portugal Duke*.—A large globular red cherry; like the May Duke, it grows in clusters, but the tree grows more vigorous than that variety; an excellent cherry, and a great bearer; ripe in July.

6. *Belle de Choisy, Cerise de la Palembree, Cerise Doucette*.—A middle sized, roundish fruit, growing in pairs on a forked stalk; skin transparent, red, mottled with amber; flesh amber colored, tender and sweet.

7. *Carnation, Late Spanish, Wax Carnation*.—This fruit, which derives its title from its color, is of a large size; the skin is a yellowish white, beautifully mottled with red; the flesh yellow, rather firm, and of a pleasant taste, but less sweet than many other varieties; the juice is sprightly, and of a pale color. This cherry ripens in July, and is held in high esteem for preserves.

8. *Holman's Duke*.—The branches of this tree are more spreading than the May Duke; the fruit is larger, of equally fine flavor, and ripens about two or three weeks later.

9. *Prince's Duke*.—This cherry was raised in the Flushing Nursery, from the seed of a Carnation cherry. The fruit is of a red color, shaped like that of its parent, and much compressed; very rich and luscious when at perfect maturity, which is in July.

10. *Kentish, Cerisier de Montmorency, Long Stem Montmorency*.—Fruit of a bright red color; ripens in July, and has an agreeable acid flavor; tree a great bearer, and fruit much esteemed when full ripe; the skin is thin of a dark red color.

11. *Short Stem Montmorency, Montmorency a gros fruit, Gros Gobet, Gobet a Courte Queue, Cerise de Valaine, Cerisier Coulard*.—This tree produces abundance of flowers, but the French complain that the fruit does not set well; it is therefore found only in the gardens of those who prefer the fine quality to the quantity of fruit. The cherry is large, flattened at both ends; the

skin is of a brilliant red, and not very dark; the flesh is yellowish white, slightly acid, and highly pleasant. This fruit is considered by some as one of the best cultivated; it ripens in July.

12. *Morello, Milan, Cerise de Nord, English Morello*.—The fruit medium sized, round; nearly black when at maturity; tree a great bearer; the fruit will keep late, and is excellent for preserving and for brandy.

13. *Plumbstone Morello*.—A tree of moderate size, of the Duke or Kentish species; a very large, dark, round cherry, nearly black; of a rich acid flavor. The stone is very large, and resembles that of a plum; a native of Virginia, introduced by Wm. Prince, Esq., of the Linnean Botanic Garden, Flushing.

14. *Waterloo*.—A large, round, dark red fruit, inclining to black at maturity; the flesh is firm, and of an excellent flavor: raised by a daughter of Mr. Knight, and so named from its perfecting its fruit soon after the battle of Waterloo. The tree is of strong but irregular growth.

15. *Gascoign's Bleeding Heart*.—Fruit large, oblong, or heart shaped, of a dark red color; its flesh pretty firm, of a pleasant and fine flavor; ripe in June.

16. *Bigarreau, Grafton, Turkey Bigarreau, White Ox Heart*.—Very large, obtuse, heart shaped, yellowish amber color, but fine red next the sun; flesh firm, white, sweet and well flavored; a beautiful and excellent fruit, not very productive; ripe in June and July.

17. *Black Eagle*.—A cherry of globular form, and middle size; dark purple, or nearly black; flesh very tender, rich, and of excellent flavor, and ripens early. The tree grows strong and very upright.

18. *Black Heart, Guignier a Fruit Noir*.—Fruit rather large, heart shaped; dark purple, approaching to black at maturity; flesh dark red, tender, of excellent flavor; ripe early in July; tree a good bearer.

19. *Black Tartarian, Black Circassian, Fraser's Black Tartarian Black Russian, Ronald's Large Black Heart, Fraser's Black Heart*.—A very large, heart shaped fruit, of a most superior quality; color dark shining purple, or black; flesh firm, dark red or purple, sweet, and of most excellent flavor. The tree and fruit combine an assemblage of good qualities; an elegant, very rapid growing tree, of great productiveness; very large and beautiful fruit, and excellent quality, ripening in June and July.

20. *White Tartarian, White Transparent Crimea, Fraser's White*.—A beautiful cherry, pale yellow, approaching to an amber next the sun; a much admired fruit, of excellent flavor, a good bearer, ripening early in July. This tree grows vigorous and upright; and is thus readily distinguished from another variety, bearing the same title.

21. *Black Carone, Couronne Coroune*.—This is a large and improved variety of the Black Tartarian, which it resembles in form, color and general properties; the fruit ripens in July; the tree yields plentiful crops.

22. *Herefordshire Black, Late Black Heart*.—Large, black, and heart shaped; a most excellent cherry, and a great bearer; and more valuable for ripening late, when most varieties are gone.

MISCELLANEOUS.

[From the Downing Gazette.]

THE BEST BUTTER.—They had a cattle show, as they call it, out here a few miles to Westbrook two or three weeks ago; but they showed a good many other things besides cattle. 'Twas the annual meeting of the Cumberland Agricultural Society. I wanted to go out and see their rarities, but being it was the day I was getting my paper ready to print I could not get time. The committees have published great long lockerum stories about the great crops that were raised and the great cattle and the thousand good things and fine things that they had there, and who got the premiums and so on. I haven't got room in my paper to publish all these things, but there's one of them that I feel bound to notice jest for relation sake.

"The committee on butter, cheese, &c. report, that the premium for the best butter exhibited be awarded to Mrs. Waity Downing of Minot, \$6."

Now, when I read this I jump'd right up and slapt my hands together a half a dozen times, I was so tickled to think Aunt Waity got it. She's one of my aunts that I set a good deal by; she's a sister to aunt Keziah, and there was always a spat between 'em before they were married whenever they churned, about which did the butter up the nicest. I used to think aunt Keziah was rather the slickest in making butter and doing all kinds of cooking, and I guess if she'd sent some butter to the cattle show the committee would have gin her the biggest premium. Howsomever all the women in our family are rather famous for making good butter, and Downingville butter will fetch any time two-cents a pound more than any other butter that's brought to market.

[From the Ohio Farmer.]

WHITE WASH.—As the citizens of our village have, much to their credit, turned their attention to painting and white washing the outside of their buildings, we insert the following in hopes something may be drawn from it to their advantage on the score of utility and economy.

Incombustible Wash and Stucco White Wash.—The basis for both is lime, which must be first slacked with hot water, in a small tub or piggion, and covered, to keep in the steam; it then should be passed in a fluid form, through a fine sieve, to obtain the flower of the lime. It must be put on with a painter's brush—two coats are best for outside work.

First. To make a fluid for the roof, and other parts of wooden houses, to render them incombustible, and coating for brick, tile, stone work and rough cast, to render them impervious to the water, and give them a durable and handsome appearance. The proportions in each recipe are five gallons. Slack your lime as before directed, say six quarts, into which put one quart of clean rock salt for each gallon of water to be entirely dissolved by boiling, and skimmed clean; then add to the five-gallons one pound of alum, half a pound of copersas, three fourths of a pound of potash—the last to be gradually added; four quarts of fine sand or hard wood ashes must also be added; any coloring matter may be mixed in such quantity as to give it the requisite shade. It will

look better than paint, and be as lasting as slate. It must be put on hot. Old shingles must be first cleaned with a stiff broom, when this may be applied. It will stop the small leaks, prevent moss from growing, render them incombustible, and last many years.

Second. To make a brilliant Stucco White Wash for buildings, inside and out. Take clean lumps of well burnt stone lime; slack the same as before; add one fourth of a pound of whitening or burnt alum pulverized, one pound of loaf or other sugar, three pints of rice flour made into a very thin and well boiled paste, starch or jelly, and one pound clean glue, dissolved in the same manner as cabinet makers do. This may be applied cold within doors, but warm outside. It will be more brilliant than plaster of paris, and retain its brilliancy for many years, say from fifty to one hundred. It is superior, nothing equal. The east end of the President's house in Washington is washed with it.

Feather Beds.—The want of feathers is altogether artificial, arising from a disregard of the physical and moral well being of infants and children; and he who has the good fortune never to have been accustomed to a feather bed, will never in health need or desire one, nor in sickness, except in cases of great morbid irritation, or excessive sensibility, or some disease in which the pressure of a firm or elortic substance might occasion pain.—But when a rational regard to the preservation of health shall pervade the community, feathers will no more be used without necessity, or medical advice, than ardent spirits will be swallowed without the same necessity or advice. The physician has frequently occasion to see persons who are heated, sweated, and enfeebled by sleeping on feathers, as if from a fit of sickness, enervated, dispirited, relaxed, and miserable.—*Med. Intel.*

Permanent Ink for marking Linen.—Take of lunar caustic (now called argentum nitratum) one drachm; weak solution, or tincture of galls, two drachms. The cloth must be first wetted with the following liquid, viz. salt of tartar, one ounce; water, one ounce and a half; and must be perfectly dry before any attempt is made to write upon it.

Sore Backs in Horses.—White lead, moistened with milk or sweet oil, has been recommended as the most effective application in the complaint.

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Compliments of the season—Gama Grass—Pedigrees of Dr. Hosack's cattle—The Tennessee Farmer—Ohio Tobacco, bad assorting—The markets and the weather—Sugar from boots—Mode of extracting wax from honey-comb—On the cultivation of Gama Grass—Hog-killing at Cincinnati—Fredericksburg, Va. Agricultural Society—Introduction of Lyceum System—Dr. Youatt's Lectures on Glanders continued—Choice of Fruit Trees—Scientific principles of transplanting—Mode of destroying Ants—Mrs. Waity Downing's premium Butter—Incombustible white-wash and stucco white wash—Feather Beds—Permanent Ink for marking linen—Cure for sore backs of horses.

25. **Elkhorn, Black Ox Heart.**—A large cherry, ripening between the Black Heart and the latest varieties; its flesh remarkably hard, and very peculiar; and though not high flavored, it is supposed by some, that from its solid consistence, it may be profitably cultivated, to be transported from a distance to market.

24. **Elton.**—The tree is very vigorous and productive; the fruit is pretty large, heart shaped; pale glossy yellow in the shade, but marbled with bright red next the sun; flesh firm, sweet and rich; ripens early in July.

25. **Florence.**—Large, heartshaped, depressed; of a yellow amber color, marbled with bright red in the shade, bright red next the sun; tolerably firm, juicy, rich and sweet; ripe end of June.

26. **Harrison's Heart, Red Ox Heart.**—A large heart shaped cherry, yellowish or amber color, but light red next the sun; flesh tender and high flavored; ripens early in July.

27. **Knight's Early Black.**—Blossoms early; fruit resembles the Waterloo; of a rich dark hue; its flesh is firm and juicy; it is abundantly sweet, and ripens by the middle of June.

28. **Remington White Heart.**—A moderate sized cherry, of moderate flavor; chiefly valuable for its very late maturity; said to have originated in Rhode Island.

29. **White Heart.**—This cherry ripens immediately after the May Duke; the fruit is of medium size, oblong and heart shaped, the skin is of a fine appearance, being a yellow white on the one side, and tinged with pale red next the sun; the flesh is rather firm, of pleasant flavor, accompanied by a honied sweetness; but the tree bears very indifferently.

30. **Downton.**—A new variety, raised by Mr. Knight. Fruit rather round, inclining to heart shape; of a pale yellow color, sprinkled with minute red spots, and large patches of dull red or maroon; flesh pale amber color, tender and juicy, very sweet and high flavored; ripens early in July.

SCIENTIFIC PRINCIPLES OF TRANSPLANTING.

The removing of growing plants from one part of the garden to another is done for various reasons, and the science of transplanting will consequently depend on the intention of the gardener in the operation. The principal facts to be recollected are, that every plant takes its food by the tips of the root fibres, and that the sap thence carried up into the leaves has much of its water and oxygen carried off by exposure to light, particularly to sunshine. It follows that if part or all of the tips of the root fibres be broken off or bruised, the plant will be kept hungry or starved, just as an animal would be with its mouth much injured or blocked up, while if a plant in such a state is placed in the sunshine, the water and oxygen carried off thereby, will very soon cause it to flag, wither, and die.—*Rennie.*

A Mode of Destroying Ants.—A writer by the name of Roughly, some of whose sketches of West India agriculture are republished by Loudon, says, "Poisoning by arsenic is the most expedient mode of getting rid of ants, as the living will feed on the dead, so that the whole nest, (by devouring one another,) are thus killed."

BALTIMORE PRODUCE MARKET.

These prices are carefully corrected every Monday.

	PER.	FROM	TO
BEANS, white field,	bushel	60	62
CATTLE, on the hoof,	100 lbs	6 00	6 00
Slaughtered,	"	3 00	4 00
CORN, yellow,	bushel	60	62
White,	"	60	62
COTTON, Virginia,	pound	17	17
North Carolina,	"	14	16
Upland,	"	17	18 1/2
FEATHERS,	pound	35	37
FLAXSEED,	bushel	1 62	1 70
FLOUR—Best white wheat family,	barrel	6 00	6 50
Do. do. baker's,	"	5 50	6 00
Do. do. Superfine,	"	4 75	5 00
Super Howard street,	"	4 62	4 75
wagon price,	"	4 50	
City Mills, extra,	"	4 87	5 00
Do. do. do.,	"	4 75	4 87
Buckhanna,	"	5 25	
Rye,	"	4 00	4 12
GRASS SEEDS, red clover,	bushel	5 50	6 00
Timothy (herds of the north),	"	3 00	3 50
Orchard,	"	3 00	3 50
Tall meadow Oat,	"	2 00	2 50
Herds, or red top,	"	1 25	
HAY, in bulk,	ton	16 00	
HEMP, country, dew rotted,	pound	6	7
water rotted,	"	7	8
HOGS, on the hoof,	100 lbs	5 00	
Slaughtered,	"	5 50	
HOPS—first sort,	pound	15	
second,	"	13	
refuse,	"	11	
LIME,	bushel	30	33
MUSTARD SEED, Domestic,	"	5 00	6 00
OATS,	"	33	35
PEAS, red eye,	bushel	60	
Black eye,	"	60	85
Lady,	"	100	
PLASTER PARIS, in the stone,	ton	3 12	
Ground,	barrel	1 37	
PALMA CHRISTA BEAN,	bushel	1 50	1 58
RAGS,	pound	3	4
RYE,	bushel	65	68
TOBACCO, crop, common,	100 lbs	4 25	5 00
brown and red,	"	5 00	7 00
fine red,	"	7 00	9 00
wrappery, suitable,	"		
for segars,	"	6 00	12 00
yellow and red,	"	8 00	12 00
yellow,	"	13 00	17 00
fine yellow,	"	15 00	25 00
Seconde, as in quality,	"	3 50	5 00
ground leaf,	"	5 00	9 00
Virginia,	"	4 00	
Rappahannock,	"		
Kentucky,	"	4 00	9 00
WHEAT, white,	bushel	1 03	1 09
Red,	"	90	95
WHISKY, 1st pf. in bbls,	gallon	31	32
In bbls,	"	29	
wagon price,	"	29	30
WAGON FREIGHTS, to Pittsburgh,	100 lbs		1 25
To Wheeling,	"		1 50
WOOL, Prime & Saxon Fleeces,	pound	50 to 60	24 to 26
Full Merino,	"	44	50 22 24
Three fourths Merino,	"	37	44 22 24
One half do.,	"	33	37 22 24
Common & one fourth Meri,	"	30	33 20 22
Pulled,	"	31	33 22 24

WESTPHALIA GEESE.

A FEW pairs of these very superior Geese are now ready for delivery at 5 dollars a pair. Apply to
I. I. HITCHCOCK,
 Amer. Far. Estab.

WHITE TURKIES.

I HAVE now ready for sale several pairs of these truly beautiful fowls, at \$5 a pair, they are of this year's crop.
I. I. HITCHCOCK,
 American Farmer Establishment.

BALTIMORE PROVISION MARKET.

	PER.	FROM	TO
APPLES,	barrel	3 00	5 00
BACON, ham, new,	pound	11	
Shoulders,	"	8	
Middlers,	"		
BUTTER, printed, in lbs. & half lbs.	"	25	37
Roll,	"	15	25
CIDER,	barrel		
CALVES, three to six weeks old,	each	3 00	6 00
COWS, new milch,	"	17 00	30 00
Dry,	"	6 00	16 00
CORN MEAL, for family use,	100 lbs	1 50	
CHOP RYE,	"	1 50	
EGGS,	dozen	4 49	20
FISH, Shad, salted,	barrel	5 75	6 00
Herrings, salted, No. 1,	"	4 75	
Mackerel, No. 1, 2 & 3,	"	5 00	7 00
Cod, salted,	cwt	2 50	3 00
LAMBS, alive,	each	1 25	2 00
Slaughtered,	quart r	31	50
LARD,	pound	8	9
ONIONS,	bushel	62	75
POULTRY, Fowls,	dozen	1 50	2 25
Ducks,	"		2 50
POTATOES, Irish,	bushel	40	62
Sweet,	"		
TURNIPS,	"	37	50
VEAL, fore quarters,	pound	3 1/2	4
Hind do.	"	6 1/2	

ADVERTISEMENTS.

TO NURSERY MEN.

1630 Peach Stocks—One year old.
 45 do. do.—two years old.
 520 Pear do. two do. do.
 740 Apple do. two do. do.
 For sale cheap. Enquire at this Establishment.
 Dec 9.

GRAPE VINES.

HERREMONT'S Madeira, one, two, and three years old, from 25 cents to 75 each.
 Isabella, two and three years old, at 25 to 50 cts each.
 Catawba, one year old, 25 cts. each.
 White Scuppernon, two years old, at 37 1/2 cents each.
 Sultana, one year old, at 50 cts. each.
 Woodson, two years old, at 37 1/2 cents each.
 Red Bland, one year old, at 25 cts. each.
 Are for sale at this establishment, and will be well packed to go any distance. no. 25

GAMA GRASS SEED

JUST received, and for sale at this Establishment—
 Price 50 cents per ounce.

PEA FOWLS.

ONE pair 2 years old, and one pair 3 years old, for sale at this establishment. Price \$3 a pair. no 4

AGENCY FOR TREES, &c.

THE subscriber respectfully offers his services to his customers and the public generally, as agent for the procurement of Fruit and other Trees. It may not be generally understood or duly considered, that few nurseries contain all kinds of trees in equal perfection. One, for instance, is celebrated for its fine apple trees, another for its peaches, and a third for its plums or pears, while scarce any of them can make up a collection of all kinds of trees of the best quality. In this respect the subscriber flatters himself that he possesses peculiar advantages. His own nursery is not extensive or forward enough to afford many trees for sale yet, and his acquaintance with nearly all the most eminent nurserymen in this country, and of the peculiar excellencies of their respective establishments enables him to select from them all, probably a better collection of fruit trees than any one of them can furnish. Trees ordered from any particular nursery, or to be selected by me, will be charged at nursery prices and 10 per cent commission added: Orders ought to be forwarded immediately, and all confided to the subscriber's agency shall receive his best attention.

I. I. HITCHCOCK,

BAKEWELL RAMS.

TWO Bakeswell Rams of good size and quality, for sale by a farmer near Baltimore at \$2 each. Apply
I. I. HITCHCOCK,

FRUIT TREES—CHEAP.

An Invoice of fruit trees from a first rate nursery, having been on hand, is offered by the owner for sale at a reduced amount. The opportunity is a favorable one for procuring a lot of first rate trees, at a great bargain. The following is a list of the trees which are laid in the ground by the heels so as to continue unhurt till next spring if necessary.

APPLES.

- 2 Monstrous Pippin.
- 2 Royal Pearmain.
- 2 Long Island Russet.
- 2 Winter Pearmain.
- 2 Carthouse.
- 2 Bellflower.
- 2 Vandevere.
- 2 Red sweet Vandevere.
- 2 Michael Henry Pippin.
- 1 Winesap.
- 6 York Greening.
- 7 Red Streak.

PEACHES.

- 1 Teton de Venus.
- 4 Malceston.
- 1 Lehman's cling.
- 2 Gough's Cling.
- 3 Oblong open Peach.
- 1 Fine Cling.
- 2 Early Elza.

CHERRIES.

- 3 Oxheart.
- 3 York Duke.
- 3 Tartarian.
- 3 Red heart.
- 3 Bleeding do.
- 2 Morrello.
- 1 Orleans.
- 2 May Duke.

QUINCES.

- 1 Portugal.
- 1 Orange.

The Invoice including packing mats, &c. amounts to \$30, and the whole will be sold for \$20, which may be sent to
I. I. HITCHCOCK,
 Amer. Farm. Estab.

MORUS MULTICAULIS.

THE subscriber has on hand a few hundred of this celebrated Tree, unrivalled in the quality of its leaves as food for the silk worm, for which he is ready to receive orders (accompanied by the cash) with particular directions for the delivery of the trees on or after the first of Nov. next. Price 50 cents each, \$5 per dozen, or \$40 per hundred.

The success and ease with which this tree is propagated, the extraordinary quickness of its growth, the superiority of its leaves over all others for the silk culture, and its uncommon luxuriance and beauty, altogether recommend it to the favourable notice of every farmer as a most valuable acquisition.
I. I. HITCHCOCK,
 Aug. 26. Amer. Farm. Estab.

TERMS OF THIS PAPER.

1. Price five dollars per annum, payable in advance.
 2. When this is done, 50 cents worth of any kind of seeds on hand will be delivered or sent to the order of the subscriber with his receipt.

3. The manner of payment which is preferable to any other for distant subscribers, is by check or draft on some responsible party here, or else by remittance of a current bank note; and to obviate all objection to mail transmission, the conductor assumes the risk.

4. Subscriptions are always charged BY THE YEAR, and never for a shorter term. When once sent to a subscriber the paper will not be discontinued (except at the discretion of the publisher) without a special order, on receipt of which, a discontinuance will be entered, to take effect at the end of the current year of subscription.

5. Subscribers may receive the work either by mail in weekly numbers, or in monthly or quarterly portions; or else in a volume (ending in May annually), handsomely pressed, half bound and lettered (to match with the American Farmer) by such conveyance as they may direct, but the \$5 must in all these cases be paid in advance.

6. ADVERTISEMENTS relating to any of the subjects of this paper will be inserted once at one dollar per square, or at that rate for more than a square, and at half that rate for each repetition.